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FIT Clinical Decision Making

COMPLETE HEART BLOCK AND SUBARACHNOID HEMORRHAGE: WHAT'S THE LINK?

Poster Contributions
Hall C
Saturday, March 29, 2014, 3:45 p.m.-4:30 p.m.

Session Title: FIT Clinical Decision Making: Congenital and Electrophysiology
Abstract Category: Arrhythmias and Clinical EP
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Background: Cardiac involvement of sarcoidosis occurs in 25% of patients. The most common manifestation is complete heart block (CHB) from granulomatous infiltration of the conduction system. A dual-chamber implantable cardioverter-defibrillator (ICD) is implanted for pacing and primary prevention of sudden cardiac death.

Case: A 39-year-old African American woman without a past medical history was transferred from a community hospital with a subarachnoid hemorrhage (SAH). She had 5 days of preceding fatigue, lightheadedness, and nausea. On the day of admission, she had a syncopal event upon standing resulting in head trauma. The initial ECG showed tri-fasicular block. A head CT showed a small SAH in the bifrontal lobes tracking along the interhemispheric fissures. Upon transfer, she was noted to be hemodynamically stable with no neurological deficits. Cardiopulmonary examinations were normal. On hospital day 2, she had a 9 second pause on telemetry and was briefly unarousable. ECG showed CHB with a junctional escape. An emergent transvenous pacemaker was placed.

Decision-making: Echocardiogram showed normal left ventricular size and function with no wall motion abnormalities. Chest X-ray (CXR) showed 1.4cm nodular opacities in the both lower lobes. Laboratory testing including blood counts, inflammatory markers, lyme titer and thyroid testing were unremarkable. Given a lack of clear etiology of the patient's CHB and a suspicious CXR, a F-18 FDG PET-CT scan and Tc-99m sestamibi SPECT scan was performed. There was intense FDG uptake in the anteroseptal region and a small size, mild severity perfusion deficit in the inferolateral wall that improved with stress. There were multiple enlarged FDG avid lymph nodes in the left supraclavicular, mediastinal, subcarinal and right hilar regions and innumerable liver and splenic lesions. Transbronchial biopsy confirmed sarcoidosis. She underwent a successful ICD implantation.

Conclusion: This case demonstrates the importance of a good differential and evaluation in the workup of syncope. Cardiac sarcoidosis should be a consideration in a young person with conduction abnormalities without an obvious etiology.